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## (12) DEMANDE DE BREVET CANADIEN CANADIAN PATENT APPLICATION (13) A1

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(54) Titre: DISPOSITIF « I-WITNESS »

(54) Title: I-WITNESS

#### (57) Abrégé/Abstract:

The present invention relates to a unique digital video capturing device primarily intended for automotive use. The device is unique in that it is constantly recording one or more video signals, while external power is applied from the vehicle's power. The recording is terminated by an internal impact switch, or by manually depressing a stop switch. Activation of either trigger device will cause the recording to continue for a predetermined amount of time and then automatically stop, saving the complete loop of video data to non-volatile memory. The device has provisions for a removable solid state media chip, as well as an internal non-removable memory chip. Internal back-up power is provided, in the event of a collision that disabled vehicle power. In integrated version could be built into the vehicle's interior rear-view mirror, and be powered through the ignition switch. Video capture can occur from a forward facing sensor or a pair of opposing sensors for an expanded view.





Patent application

2,469,728

Abstract:

The present invention relates to a unique digital video capturing device primarily intended for automotive use. The device is unique in that it is constantly recording one or more video signals, while external power is applied from the vehicle's power. The recording is terminated by an internal impact switch, or by manually depressing a stop switch. Activation of either trigger device will cause the recording to continue for a predetermined amount of time and then automatically stop, saving the complete loop of video data to non-volatile memory. The device has provisions for a removable solid state media chip, as well as an internal non-removable memory chip. Internal back-up power is provided, in the event of a collision that disabled vehicle power. In integrated version could be built into the vehicle's interior rear-view mirror, and be powered through the ignition switch. Video capture can occur from a forward facing sensor or a pair of opposing sensors for an expanded view.

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Inventor:

Tom Peterek

Invention Name:

I-Witness

# I-Witness

## Description:

A small 12 volt digital camera/recorder that records an endless loop of data in 5 or 10 minute increments. The data would be overwritten on the internal memory but would be copied to a removable memory device (s.d. memory or c.f. memory) in the event of an accident or by manual activation. The unit would be mounted to the rear view mirror as an aftermarket device, or built in as an OEM unit. The unit would be forward facing, incorporating a low light image capturing device, with the possibility of dual capturing devices fcing in opposite directions.

#### Features:

Dual download using push button or crash sensor. Both allow some time to elapse before downloading.

Backup battery or high value cap to complete download in the event of car battery failure.

SD or similar memory card for download

Single and Dual input sensor models

Possibility of a personal device that are less than

Possibility of a personal device that can be worn or attached to bike

Format could be avi or some other compresed video.

Ideal record time would be 10 minutes with a shut off delay of 1 minute.

#### Uses:

Record accidents and near misses as they really happened, thus reducing court costs and the need to hunt down witnesses.

Reduce aggressive driving (once established) since the touch of a button will store the past 5 minutes of events.

Serve as a tool to report erratic or offensive driving.

### Future potential:

Personal version for the feeling of added security
Automotive version can incorporate data like speed and direction.
Bicycle and motorcycle version
Multi angle view version

Patent application

2,469,728

#### We claim:

- 1. A device which will continuously record a digital video signal to an internal, non-volatile memory chip and optionally, a removable memory card, from one or more internal video capture sources, for the primary purpose of recording the actual events of an automobile accident or other unusual events.
- 2. The device as claimed in claim one will be fastened to the interior of an automobile or other vehicle, in a location which presents a clear view of the path of the automobile, ideally, attached to or mounted inside the rear view mirror.
- 3. The device as claimed in claim one will contain an impact (shut-off) switch and electronic timer, for the purpose of terminating the video recording process a short time after the switch is triggered, capturing events leading to the time of triggering and a short time after the triggering. The purpose of this terminating of the recording will be to preserve a video record of the events that caused the impact switch to trigger.
- 4. The device as claimed in claim one will also contain a manual trigger to preserve any unusual event that would not cause the impact sensor to trigger the device. This process would be similar to that described in claim three, above.
- 5. The device as claimed in claim one will contain one forward facing video capture sensor an optionally contain an additional rear-facing sensor to increase the video coverage area.
- 6. The device as claimed in claim one will contain an internal, short term power supply, sufficient to complete the shut down process described in claim three, in the event that external power is disengaged due to impact.
- 7. The device as claimed in claim one, in its portable form, will attach to the vehicle at a good vantage point and obtain power through an external power cord that plugs into the vehicle cigarette lighter socket. Optionally, a model can be directly housed within the rear view mirror of the vehicle and hard wired into the ignition circuit.

Inventor:

Tom Peterek

Invention Name:

I-Witness

Application number	numéro de demande: 2469728
Figures:	
Pages:	
	Drawing

Unscannable items received with this application (Request original documents in File Prep. Section on the 10th floor)

Documents reçu avec cette demande ne pouvant être balayés (Commander les documents originaux dans la section de préparation des dossiers au 10ème étage)