

Stolen Vehicle Recovery Using Satellite Technology
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This Cordova Ventures Whitepaper discloses the use of a satellite network for the location of assets, such as for the location of stolen vehicles. For example, as described below, a satellite network can be combined with another wireless network, such as with a proprietary wireless network, for asset location and recovery. Use of a proprietary wireless network for stolen vehicle recovery is described, for example, in U.S. Patent Application Publication No. US 2004-0198309. Use of a satellite network for asset tracking is described, for example, in U.S. Patent No. 7,099,770.

The concept disclosed in this Whitepaper can be described in one instance as a method of utilizing a satellite network to supplement stolen vehicle recovery radio network sites in activation of radio tracking and recovery of such a vehicle, comprising: (1) equipping the vehicle with both a transponder for replying with a unique reply code transmission to a query from the recovery networks and a satellite transceiver for replying with a unique identification transmission to a query from a satellite network; (2) upon confirming vehicle theft at a control center, instructing both the recovery network and the satellite network to send their respective queries to the respective transponder and satellite transceiver of the vehicle; (3) receiving from the satellite transceiver, said unique identification transmission at the satellite network and sending from such network an identifying number thereof to the control center for providing over the satellite network location guidance information to a recovery vehicle; and (4) receiving from the vehicle

transponder at such recovery vehicle its reply code transmission to enable fine tracking by the recovery vehicle of the stolen vehicle.

In another aspect, the satellite transceiver can comprise a simplex satellite transceiver. The satellite transceiver can be coupled to a position location unit, such as to a GPS receiver system. In a further aspect of the concept, the satellite transceiver can transmit the unique identification transmission on a transmission interval. For example, the satellite transceiver can transmit a message to the control center comprising a location of the vehicle on a transmission interval. The transmission interval can be at least one of a random or a pseudo-random interval, or it can be based on at least one of the location of the vehicle or a speed of the vehicle.

In a further useful aspect of the concept, the satellite transceiver can be coupled to a motion detection unit configured to detect a change of vehicle motion. Upon detecting a change of vehicle motion, a message can be sent to the control center over the satellite network. By way of example, the message can comprise an indication that a change in vehicle motion has occurred, and/or at least one of the location of the vehicle or a speed of the vehicle.