

Abstract

ONBOARD UNIT, TOLL COLLECTION SYSTEM, TOLL COLLECTION
METHOD, AND PROGRAM

To provide an onboard unit that can implement billing processing according to the states of individual vehicles.

Solution

An onboard unit includes a vehicle information acquisition unit configured to acquire information on a vehicle including a state of the vehicle whose state can change on a toll road. The vehicle information acquisition unit acquires information on the vehicle including a state of the vehicle from an onboard sensor mounted on the vehicle. The vehicle information acquisition unit acquires the number of occupants in the vehicle as a state of the vehicle from a seating sensor that is a type of the onboard sensor. The vehicle information acquisition unit acquires an axle load of the vehicle as a state of the vehicle from an axle load sensor that is a type of the onboard sensor. The vehicle information acquisition unit acquires the number of axles of the vehicle, whose connected wheels are in contact with ground, as a state of the vehicle from the lift that is a type of the onboard sensor.

FIGURE 2.