

ABSTRACT

SATELLITE TIME DISTRIBUTION SYSTEM

A satellite time distribution system for distributing time information to receiving apparatuses via a geostationary satellite, includes: a reference clock which generates time to be a reference; transmitting means for generating time information by adding an ID to a time obtained from the reference clock, encrypting the time information and transmitting the encrypted time information via the geostationary satellite; receiving means for receiving the time information returned from the geostationary satellite; delay calculating means for measuring a reception time of the time information based on a time of the reference clock, and determining a difference between the time included in the time information and the measured reception time as delay time; and delay time information transmitting means for generating delay time information by adding, to the delay time, a same ID as the ID included in the time information, and transmitting the delay time information to the receiving apparatuses.

FIGURE 1.