charger control signal 108 received from the charging device side communication unit 11 instructs the charging device 8 to start charging the storage battery 4, a charger side controller 801 of the charging device 8 controls the charging mechanism 10, and moves the charging mechanism 10 to the upper side of the route bus 1. The charger side controller 801 then supplies electric power to the route bus 1, after bringing the charging mechanism 10 into contact with the charging port 6. On the other hand, when the charger control signal 108 received from the charging device side communication unit 11 instructs the charging device 8 to stop charging the storage battery 4, the charger side controller 801 controls the charging mechanism 10 and moves the charging mechanism 10 away from the upper side of the route bus 1. The charger side controller 801 then cancels the contact between the charging mechanism 10 and the route bus 1, and stops supplying electric power to the route bus 1. When the supply of electric power to the route bus 1 is stopped (in other words, when charging of the storage battery 4 is finished), the charger side controller 801 shifts to a waiting mode. In this example, the waiting mode is an energy saving mode by reducing electric power consumption in the charging device 8. In the present embodiment, the charger side controller 801 shifts the charging device 8 to the waiting mode, by opening the electromagnetic switch and canceling the connection between the commercial power system and the charging device 8, or by stopping an inverter in the charging device 8.

[0025] FIG. 3 is an explanatory diagram of an example of a charging process in the charging system according to the first embodiment. In the present embodiment, upon detecting that one of the doors 2 and 3, or both of the

[0038] In this manner, with the charging system according to the third embodiment, the advance preparation process is executed when the passenger who is planning to get off at the next bus stop presses a bus stopping button 503. Consequently, when a passenger is getting off at the next bus stop, the reservation information is transmitted to the charging device 8 and the advance preparation process is executed, even if the crew of the route bus 500 does not press the charge reservation operation button 402. As a result, it is possible to reduce the operation burden on the crew. Moreover, it is possible to prevent an operation error of the charge reservation operation button 402 by the crew, and prevent the crew from forgetting to operate the charge reservation operation button 402. Furthermore, if none of the passengers is getting off at the bus stop, and the route bus 500 is going to pass through the bus stop, it is possible to prevent the advance preparation process from being unnecessarily executed.

[0039] If the route bus 500 includes an output device such as a speaker for verbally announcing the bus stop, and when the route bus 500 approaches the bus stop without the bus stopping button 503 being pressed, after the crew has pressed an activation button and a verbal announcement is output from the output device, the charge reservation unit 403 does not transmit cancel information because the reservation information 404 is not transmitted. On the other hand, when the route bus 500 does not stop at the bus stop and a reset button for erasing the message displayed on the bus stopping display 504 is pressed, after the bus stopping button 503 is pressed and the reservation information 404 is transmitted to the charging device 8, the charge reservation unit 403 hides the message on the bus stopping display 504, and transmits cancel information

according to the fourth embodiment, when the passenger P waiting for the route bus 400 is detected at the bus stop, the advance preparation process is executed. Consequently, the crew of the route bus 400 does not need to operate the charge reservation operation button 402, thereby reducing the operation burden on the crew. Moreover, it is possible to prevent an operation error of the charge reservation operation button 402 by the crew, prevent the crew from forgetting to operate the charge reservation operation button 402, and the like. Furthermore, if none of the passengers is getting off at the bus stop, and the route bus 400 is going to pass through the bus stop, it is possible to prevent the advance preparation process from being unnecessarily executed.

[0046] In the second and the third embodiments, upon receiving the reservation information 404 from the route buses 1 and 400, the charger side controller 801 of the charging device 8 immediately executes the advance preparation process. However, it is not limited thereto, and the charger side controller 801 may start executing the advance preparation process at the time preceding expected times of arrival of the route bus 400 by the time required to perform the advance preparation process. In this manner, it is possible to complete the advance preparation process immediately before each of the route buses 400 arrives at the bus stop. Consequently, it is possible to prevent unnecessary operation from being performed by the charging device 8, while the route bus 400 is not stopping at the bus stop.

[0047] More specifically, the route bus 400 includes a time-keeping unit that keeps the current time, a storage unit that stores therein distance information indicating the distance between the bus stops that the route bus 400

stops, and an acquiring unit that acquires the position of the route bus 400 (for example, a global positioning system (GPS) receiver and the like). The charge controller 107 of the route bus 400 receives bus stop identification information capable of identifying the bus stop installed with the charging device 600, from the charging device 600 via the communication controller 109. Next, the charge controller 107 reads out distance information between the bus stop that the route bus 400 has last stopped and the bus stop that is identified by the received bus stop identification information, from the storage unit. Next, the charge controller 107 calculates the expected time of arrival that is the time the route bus 400 is expected to arrive at the next bus stop, on the basis of the read distance information, the position acquired by the acquiring unit, and the current time kept by the time-keeping unit. The charge controller 107 then transmits the reservation information 404 including the calculated expected time of arrival to the charging device 600 via the communication controller 109.

[0048] The charging device side communication unit 11 of the charging device 600 transmits the bus stop identification information of the bus stop installed with the charging device 600, to the route bus 400. Moreover, the charging device side communication unit 801 receives the reservation information 404 from the route bus 400. When the charging device side communication unit 11 receives the reservation information 404, the charger side controller 801 specifies the time preceding the expected time of arrival indicated in the received reservation information 404 by the time required to execute the advance preparation process, as the start time to start executing the advance preparation time. The charger side controller

801 then executes the advance preparation process from the specified start time.

[0049] When the charging device side communication unit 11 receives the reservation information 404 from the route buses 400, the charger side controller 801 specifies the time preceding the earliest expected time of arrival of the expected times of arrival in the reservation information received from the route buses 400 by the time required to execute the advance preparation process, as the start time. The charger side controller 801 then executes the advance preparation process from the specified start time. Consequently, when the order of arrival of the route buses 400 differs from the receiving order of the pieces of reservation information 404, it is possible to execute the advance preparation process according to the expected time of arrival of the route bus 400 that arrives earliest at the bus stop.

Fifth Embodiment

[0050] The present embodiment is an example of executing the advance preparation process when the destination of the passenger who is waiting for the route bus at the bus stop has registered in the charging device in advance is matched with the destination of the route bus stopping at the bus stop. In the following explanation, the descriptions of the same portions as those of the above embodiments are omitted.

[0051] In the present embodiment, the charging device side communication unit 11 of the charging device 8 receives destination information indicating the destination of the passenger using the route bus 400, from an external terminal such as a mobile phone and a smart phone, using a social network service (SNS) and the like. The charging

device side communication unit 11 may also receive terminal position information indicating the position of an external terminal from the external terminal, with the destination information. The charger side controller 801 then sets the destination indicated in the received destination information, as the destination of the passenger who is waiting for the route bus 400 at the bus stop installed with the charging device 8.

[0052] When the destination indicated in the received destination information is matched with the destination of the route bus 400 that is the transmission source of the reservation information 404 received by the charging device side communication unit 11, the charger side controller 801 executes the advance preparation process according to the received reservation information 404. On the other hand, when the destination indicated in the received destination information is not matched with the destination of the route bus 400 that is the transmission source of the reservation information 404 received by the charging device side communication unit 11, the charger side controller 801 does not execute the advance preparation process. In this manner, when the destination of the passenger who is waiting for the route bus 400 at the bus stop differs from the destination of the route bus 400, the advance preparation process will not be executed. Thus, it is possible to prevent the advance preparation process to be performed prior to the arrival of the route bus 400 from being unnecessarily performed.

[0053] When the position indicated in the terminal position information received with the destination information does not match with the position of the bus stop installed with the charging device 8, the charger side controller 801 will not set the destination. In this

manner, it is possible to prevent a situation that the passenger will not get on the route bus 400 that has arrived at the bus stop, even if the charging device 8 has executed the advance preparation process.

[0054] When a destination input button for entering the destination by the passenger waiting for the route bus 400 at the bus stop is provided on a guiding plate and the like at the bus stop, the charger side controller 801 may set the destination that is input using the destination input button, as the destination of the passenger who is waiting for the route bus 400 at the bus stop installed with the charging device 8. If the number of passengers who have set the destination does not match with the number of passengers detected by the detector 602, the charger side controller 801 may not set the destination.

[0055] In this manner, with the charging system according to the fifth embodiment, when the destination of the passenger who is waiting for the route bus 400 at the bus stop differs from the destination of the route bus 400, the advance preparation process will not be executed. Consequently, it is possible to prevent the advance preparation process to be performed prior to the arrival of the route bus 400 from being unnecessarily performed.

[0056] Moreover, the charger side controller 801 may give incentive such as providing route guide information, adding points, and giving a discount on the fare of the route bus 400 to the passenger who has set the destination.

Sixth Embodiment

[0057] The present embodiment is an example of executing the advance preparation process by using reservation information that the charging device has acquired from