amplified signal is modulated from the baseband signal into a signal in the carrier frequency band by a transmission radio module **69** and transmitted from the antenna **60** via the circulator **61**.

Next, transmission power control while a mobile terminal transmits a data packet to the base station will be described.

A transmission power correction unit **123** derives the common transmission power control signal from a signal of the answer channel processed by the answer channel acquisition/despread circuit **63** and detector **64**. The transmission power correction unit **123** selects a transmission power control signal of the uplink traffic channel now in use by its mobile terminal, from the common transmission power control signal. For example, in the example shown in FIG. **7**, the mobile terminal transmitting a data packet by using the transmission channel **1** selects its transmission power control signal **111***a*. The selected transmission power control signal is input to the gain calculator **124** which calculates a gain so that a data packet can be transmitted at a transmission power designated by the transmission control signal, and thereafter renews the gain of the variable gain amplifier **68**. The amplified signal is modulated by the transmission radio module **69** from the baseband signal into a signal in the carrier frequency band, and transmitted from the antenna **60** via the circulator **61**.

FIG. **9** illustrates the state of transmission power control realized by the above operations of the base station and a mobile terminal.

The base station inserts common transmission power control signals **142***a*, **142***b*, **142***c*, . . . into a common answer channel shared by mobile terminals in the area and transits them. The common transmission power control signal **142** contains transmission power control signals for the respective traffic channels **1** to n. Each of the mobile terminals **1** to n transmitting data packets **1** to n to the base station derives the transmission power control signal of the traffic channel now in use by the mobile terminal, from the common transmission power control signals **142***a*, **142***b*, **142***c*, . . . In accordance with the derived transmission power control signal, the mobile terminal changes the transmission power of the data packet.

In the state shown in FIG. **9**, the width of a data packet is drawn to correspond to the receive level of the data packet at the base station. For example, in the uplink traffic channel **1**, the mobile terminal controls the transmission power such that the transmission powers are increased, reduced, and increased in response to the reception of the common transmission power control signals **142***a*, **142***b*, and **142***c*.

While a data packet is not transmitted by a mobile station, the transmission power control signal is neglected. The transmission power control signal is also neglected if it is received before a lapse time (called "control delay time") necessary for measuring the received level of a data packet at the base station after the mobile terminal transmitted the data packet. The reason for this is a possibility that the transmission power control information received before the lapse of the control delay time may be the transmission power control information of a data packet transmitted by another mobile terminal resulting in erroneous control to be made.

With the above operations, it becomes possible for the base station to perform transmission power control of the uplink traffic channels **1** to n by using the common control channel shared by the mobile terminals.

This first embodiment has the structure suitable for data communication, particularly for one way data communication. Two way data communication is performed in some case. In this case, the transmission power control signal may be contained in data of a downlink traffic channel. In the following, a mobile communication system of the second embodiment will be described which is suitable for two way communication and has a simple circuit structure, particularly of a mobile terminal.

FIG. **10** shows an example of the structure of a base station according to the second embodiment.

In FIG. **10**, like constituent elements to those of the base station of the first embodiment are represented by identical reference numerals. The operation of the base station when a reservation packet is received is similar to the first embodiment.

The base station operates in the manner similar to the first embodiment to decode a received data packet and obtain reception data from the signal line **54**. The unit **45** for measuring the received level of a traffic channel and the traffic channel transmission power control signal generator **46** generate transmission power control signals of respective uplink traffic channels.

In the second embodiment, if a mobile terminal transmits and receives a data packet to and from the base station by using an uplink traffic channel i and a down-link traffic channel k, the base station inputs the transmission power control signal of the uplink traffic channel i to the traffic channel transmission power control signal insert unit **59** of the downlink traffic channel k to insert the transmission power control signal into the data packet.

The operation will be detailed by taking as an example the case wherein the base station transmits a data packet by using a downlink traffic channel n to a mobile terminal which transmits a data packet to the base station by using an uplink traffic channel **1**. In this case, the transmission power control signal of the uplink traffic channel **1** generated by the traffic channel transmission power control signal generator **46** is input to a traffic channel transmission power control signal insert unit **59***n* of the downlink transmission channel n. The traffic channel transmission power control signal insert unit **59***n* inserts the transmission power control signal in the data packet. This data packet is spectrum spread by the spreader **57***n* and multiplexed with other channel signals by the adder **58**. The multiplexed signal is modulated by the transmission radio module **49** from the baseband signal into a signal of the carrier frequency band, and transmitted from the antenna **30** via the circulator **31**.

An example of a mobile terminal of the second embodiment is shown in FIG. **11**.

In FIG. **11**, like constituent elements to those of the mobile terminal of the first embodiment shown in FIG. **8** are represented by identical reference numerals. A switch **70** is connected to **70***a* to perform similar operations to the first embodiment, if the mobile terminal transmits a reservation packet, receives an answer packet transmitted from the base station, or only transmits a data packet to the base station (one way communication).

Next, an operation (two way communication) will be described in which a mobile terminal transmits and receives a data packet to and from the base station. In this case, the switch **10** is turned to the **70***b* side.

A data packet is received via the antenna **60**, circulator **61** and reception radio module **62**, and subjected to a reception process by the traffic channel acquisition/despread circuit **63***b* and detector **64**. The data packet output from the detector is subjected to error correction/decoding by the decoder **65** to obtain reception data from the signal line **66**.