CLAIMS

1. A wireless tag comprising:

an IC chip; and

an antenna including

a first dipole antenna that is connected to a first connection part of the IC chip and receives a radio wave, and

a second dipole antenna that is connected to a second connection part of the IC chip, is provided to be orthogonal to the first dipole antenna, and receives the radio wave simultaneously with the first dipole antenna, wherein

the antenna is configured to receive the radio wave in a first linear polarization state and the radio wave in a second linear polarization state wherein a polarization plane of the radio wave in the second linear polarization state is orthogonal to a polarization plane of the radio wave in the first linear polarization state,

the first dipole antenna is configured to output a first received power based on a first radio-wave component of the received radio wave, which is directed in a longitudinal direction of the first dipole antenna,

the second dipole antenna is configured to output a second received power based on a second radio-wave component of the received radio wave, which is directed in a longitudinal direction of the second dipole antenna, and

the IC chip is configured to calculate a combined value between a first component of the first received power directed in the longitudinal direction of the first dipole antenna and a second component of the second received power directed in the longitudinal direction of the second dipole antenna, and outputs the combined value as a combined received power.

2. The wireless tag according to claim 1, comprising a dielectric body that is provided to be in contact with each of the first dipole antenna and the second dipole antenna.

3. A communication system comprising:

the wireless tag according to claim 1 or 2; and

a communication device that communicates with the wireless tag in a contactless manner.

4. The communication system according to claim 3, wherein the communication device includes a patch antenna that transmits a radio wave of a circular

polarized wave.

5. The communication system according to claim 4, comprising a dielectric body that is provided to be in contact with a conductive part of the patch antenna.

6. The communication system according to claim 4 or 5, wherein the patch antenna includes

a radiator that radiates a radio wave, and

a conductive base plate that is provided with a gap with respect to the radiator.

7. A communication terminal comprising:

an IC chip;

an antenna including

a first dipole antenna that is connected to a first connection part of the IC chip and receives a radio wave, and

a second dipole antenna that is connected to a second connection part of the IC chip, is provided to be orthogonal to the first dipole antenna, and receives the radio wave simultaneously with the first dipole antenna, wherein

the antenna is configured to receive the radio wave in a first linear polarization state and the radio wave in a second linear polarization state wherein a polarization plane of the radio wave in the second linear polarization state is orthogonal to a polarization plane of the radio wave in the first linear polarization state,

the first dipole antenna is configured to output a first received power based on a first radio-wave component of the received radio wave, which is directed in a longitudinal direction of the first dipole antenna,

the second dipole antenna is configured to output a second received power based on a second radio-wave component of the received radio wave, which is directed in a longitudinal direction of the second dipole antenna, and

the IC chip is configured to calculate a combined value between a first component of the first received power directed in the longitudinal direction of the first dipole antenna and a second component of the second received power directed in the longitudinal direction of the second dipole antenna, and outputs the combined value as a combined received power.

8. A communication system comprising:

the communication terminal according to claim 7; and

a communication device that communicates with the communication terminal in a contactless manner.