# CLAIMS

1. An antenna device comprising:

a receiving antenna that receives radio waves;

a transmitting antenna that is provided adjacent to the receiving antenna and transmits primary radio waves to an antenna that is different from the receiving antenna; and

a reflecting member that reflects towards the receiving antenna some leaked radio waves leaked from the transmitting antenna, wherein

the reflecting member is arranged such that reflected waves, some of which are the leaked radio waves, are reflected and reach the receiving antenna after being phase-shifted relative to direct waves, which are the leaked radio waves that directly reach the receiving antenna, and

the antenna device is configured such that interference is caused due to the phase shift between the direct waves and the reflected waves, attenuating the direct waves from the transmitting antenna to the receiving antenna.

2. The antenna device according to Claim 1, wherein

the transmitting antenna is an antenna that has the directivity of transmitting radio waves toward a predetermined range and has leaked radio waves leaked out of the predetermined range.

3. The antenna device according to Claim 2, wherein

the transmitting antenna is an antenna that is formed in a rod-like shape, transmits radio waves from an end portion in the direction of an axis to the predetermined

range and has leaked radio waves radiated at the center of the axis.

4. The antenna device according to any one of Claims 1 to 3, wherein the reflecting member is arranged such that a reflected wave having a shortest propagation path among the reflected waves that reach the receiving antenna is phase-shifted relative to a direct wave having a shortest propagation path among the direct waves by half wavelength at the position of the receiving antenna.

5. The antenna device according to any one of Claims 1 to 4, wherein the antenna device is configured such that the reflecting member and the transmitting antenna and/or the receiving antenna relatively move according to (i) the distance between the receiving antenna and the transmitting antenna and/or (ii) the frequency of the radio waves transmitted from the transmitting antenna.

# CLAIMS

1. An antenna device comprising:

a receiving antenna that receives radio waves;

a transmitting antenna that is provided adjacent to the receiving antenna and transmits primary radio waves to an antenna that is different from the receiving antenna; and

a reflecting member that reflects towards the receiving antenna some leaked radio waves leaked from the transmitting antenna, wherein

the reflecting member is arranged at a predetermined interval from both the transmitting antenna and the receiving antenna such that a reflecting surface of the reflecting member is directed to the transmitting antenna and the receiving antenna,

reflected waves, some of which are the leaked radio waves, are reflected by the reflecting member and reach the receiving antenna after being phase-shifted relative to direct waves, which are the leaked radio waves that directly reach the receiving antenna, and

the antenna device is configured such that interference is caused due to the phase shift between the direct waves and the reflected waves, attenuating the direct waves from the transmitting antenna to the receiving antenna.

2. The antenna device according to Claim 1, wherein

the transmitting antenna is an antenna that has the directivity of transmitting radio waves toward a predetermined range and has leaked radio waves leaked out of the predetermined range.

3. The antenna device according to Claim 2, wherein

the transmitting antenna is an antenna that is formed in a rod-like shape, transmits radio waves from an end portion in the direction of an axis to the predetermined range and has leaked radio waves radiated at the center of the axis.

4. The antenna device according to any one of Claims 1 to 3, wherein

the reflecting member is arranged such that a reflected wave having a shortest propagation path among the reflected waves that reach the receiving antenna is phase-shifted relative to a direct wave having a shortest propagation path among the direct waves by half wavelength at the position of the receiving antenna.

5. The antenna device according to any one of Claims 1 to 4, wherein

the antenna device is configured such that the reflecting member and the transmitting antenna and/or the receiving antenna relatively move according to (i) the distance between the receiving antenna and the transmitting antenna and/or (ii) the frequency of the radio waves transmitted from the transmitting antenna.