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Forster

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(54) **REFLECTIVE COMMUNICATION USING RADIO-FREQUENCY DEVICES**

(76) Inventor: **Ian J. Forster**, 31 Great Cob, Chelmsford, Essex (GB) CM1 6LA

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H04B 7/00 (2006.01)

(52) **U.S. Cl.** **455/500; 455/41.2; 455/526**

(58) **Field of Classification Search** **455/41.2, 455/500, 526, 334, 337, 130; 340/10**
See application file for complete search history.

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Primary Examiner—Yuwen Pan

(74) *Attorney, Agent, or Firm*—Christensen O'Connor Johnson Kindness PLLC

(57) **ABSTRACT**

The present invention relates to a reflective communication system that allows information from wireless communication devices, such as radio-frequency identification devices (RFID), to be reflectively communicated to a receiver in lieu of using a separate communication system. A transmitter transmits a communication signal, having a carrier frequency, to the wireless communication device to provide power. The wireless communication device modulates a data signal onto the communication signal to form a reflected data signal. The wireless communication device reflects the reflected data signal directly to the receiver. In this manner, the process of communicating information from a wireless communication device is accomplished in one communication system rather than two. If the receiver also directly receives the communication signal from the transmitter, the receiver can determine the location of the wireless communication device relative to the transmitters.

35 Claims, 9 Drawing Sheets

