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WO 2011/097118 A2 **US 20110317594 A1**
US 20070262849 A1 **US 20070205865 A1**
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(54) Title of the Invention: **RFID reader for communication in the ultra-high frequency band, intelligent system for radiofrequency identification and transmission of data**
 Abstract Title: **RFID reader for communication in the ultra-high frequency band, intelligent system for radiofrequency identification and transmission of data**

(57) RFID reader (401) for communication in the ultra-high frequency band and its method of operation. The RFID reader (401) contains a microprocessor (200), a transceiver (201), a low-frequency circuit (202), first coupler (213), second coupler (203), a quadrature demodulator (204), an antenna (205), a power supply circuit (206), a high-frequency front-end circuit (209), a carrier frequency suppression circuit (212), or a system on chip circuit (220) in place of the microprocessor (200) and the transceiver (201), optionally containing a power source (207). Intelligent system for radiofrequency identification and transmission of data and the method of operation of radiofrequency identification and transmission of data in this system. The intelligent system contains at least one RFID reader (401), at least one passive tag (402) and/or at least one active tag (403), a router (400), and a server or a cloud (406). The connection between the RFID reader (401) and a passive tag (402) is ensured by radio waves (405), the connection between the RFID reader (401) and the router (400) is ensured by a radio mesh network (404) created in the UHF band, while active tags (403) are part of the radio mesh network (404), and the connection between the router (400) and the server or cloud (406) is ensured by a cable connection or a wireless network (407).

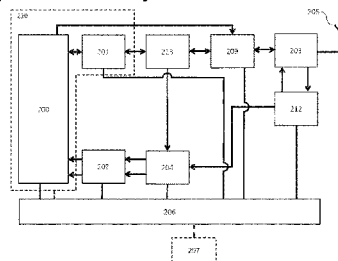


Fig. 1

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