

13

27. The system of claim 1, wherein the carrier signal is one among the following group: an RF carrier signal; a light carrier signal; or an audio carrier signal.

28. The system of claim 1, further comprising a chime, coupled to the external communication device, and configured to inform the patient to initiate communication between the external communication device and the internal communication device.

29. A method of communicating between the skin of a patient, comprising the steps of:

implanting an internal communication device inside the body of a patient;

transmitting a carrier signal into the body of the patient during communication from the internal communication device to an external communication device;

modulating the carrier signal inside the body of the patient with information by selectively reflecting the carrier signal or not reflecting the carrier signal the modulating step further comprising the steps of modulating the carrier signal with information of a first state during a first time interval during which the carrier signal is reflected and modulating the carrier signal with information of a second state during a second time interval during which the carrier signal is not reflected; and

14

demodulating the information from the carrier signal by detecting when the carrier signal is reflected and when the carrier signal is not reflected outside the body of the patient.

30. The method of claim 29, wherein the modulating step further comprises the step of designating the first time interval and the second time interval to be substantially the same length in duration.

31. The method of claim 29, wherein the modulation step further comprising the step of reflecting the carrier signal when modulating the carrier signal with the information of a first state.

32. The method of claim 29, wherein the modulation step further comprising the step of not reflecting the carrier signal when modulating the carrier signal with the information of a second state.

33. The method of claim 29, further comprising the step of transmitting the information to a processing station.

34. The method of claim 33, further comprising the step of sending control information from the processing station to the internal communication device inside the body of a patient.

* * * * *