Claims

1. A golf system comprising: ~~for establishing a communication with an object comprising a magnetic field detecting device, the system including~~

a tee apparatus that includes:

a support;

an electromagnetic coil mounted on the support and configured to transmit a unique identification code by generating a changing magnetic field;

a marking for ball positioning; and

~~associated~~ circuitry configured to supply electrical signals to the electromagnetic coil to generate the ~~a~~ changing magnetic field~~;~~, and ~~means for positioning the object in juxtaposition to the coil, whereby changes in the magnetic field can be detected by the detecting device of the object.~~

a golf ball including:

a magnetometer configured to:

receive the unique identification code of the tee apparatus by detecting the changing magnetic field of the electromagnetic coil; and

upon receiving the unique identification code, subsequently serve as a compass to monitor movement of the golf ball; and

circuitry configured to identify when the golf ball is located at the tee apparatus based on the unique identification code.

2. A golf system according to claim 1, wherein the circuitry of the tee apparatus is configured to supply pulsed signals that are coded with the unique identification code to the electromagnetic coil.

~~3. A system according to claim 2, wherein the pulsed signals are coded.~~

~~4. A system according to any preceding claim, wherein the magnetic field detection device is a magnetometer.~~

~~3~~5. A golf system according to claim ~~1~~4, wherein the circuitry of the tee apparatus is configured to supply successive messages over a predetermined range of frequencies.

~~4~~6. A golf system according to claim 1, wherein the tee apparatus ~~any preceding claim, and~~ further includes ~~including~~ a radio signal receiver for communication with a radio signal transmitter of the golf ball~~in a positioned object~~.

5. A golf system according to claim 4, wherein the radio signal transmitter is configured to transmit a signal including an identification code unique to the golf ball.

~~6~~7. A golf system according to claim ~~6~~5, wherein the radio signal receiver is configured to receive the signal that includes the ~~signals including an~~ identification code unique to the golf ball~~of the object~~.

~~8. A system according to any preceding claim wherein the object is a golf ball.~~

~~9. A golf facility comprising a plurality of systems according to any preceding claim and a plurality of golf balls, the systems being arranged at or near one or more of a tee, a ball dispenser, a hazard feature, a battery charger for respective batteries within the balls, a drop zone, and a cup or other receiver forming a hole.~~

~~7~~10. A golf system ~~facility~~ according to claim ~~9~~1, wherein the golf ball includes a radio signal transmitter and the tee apparatus includes a radio signal receiver, wherein the radio signal transmitter is configured to transmit, ~~comprising a plurality of systems according to claims 6 and 7 and a plurality of golf balls each having a unique identification code which is arranged to be transmitted~~ by a radio signal, an

identification code that is unique to the golf ball to the radio signal receiver of the tee apparatus ~~to a respective system~~ at which the golf ball ~~it~~ is positioned.

8. A golf system according to claim 1, wherein the tee apparatus further includes a frame member that houses the circuitry.

9. A golf system according to claim 8, wherein the tee apparatus further includes:
a base member supported by the frame member and defining a central hole;
a base support plate located below the central hole of the base member.

10. A golf system according to claim 1, wherein the magnetometer of the golf ball is connected to a switching arrangement and configured to activate the switching arrangement upon detecting the changing magnetic field of the tee apparatus.

11. A golf system according to claim 1, wherein the tee apparatus further includes a cover plate that carries the marking for ball positioning.

~~11. A method of establishing a communication between a system and an object which comprises a magnetometer, the system comprising an electromagnetic coil, the method comprising the step of supplying electrical signals to the coil to generate a changing magnetic field and detecting the changing magnetic field with the magnetometer.~~

~~12. A method according to claim 11 wherein the electrical signals and the magnetic field changes are pulsed.~~

~~13. A method according to claim 11 or 12, wherein the electrical signals and the magnetic field changes are coded.~~

~~14. A method according to any of claims 11 to 13 wherein the magnetometer is connected to a switching arrangement and wherein establishment of the communication activates a switching function of the switching arrangement.~~

~~15. The combination of a magnetometer connected to a switching arrangement and an electromagnetic coil which is connected to receive signals from a signalling arrangement and which is arranged to generate a corresponding changing magnetic field, wherein the signalling arrangement is configured to cause the coil to transmit an encoded message and the magnetometer is configured, upon detection of the encoded message, to activate the switching arrangement.~~