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(54) Title: COMMUNICATIONS SYSTEM FOR MONITORING THE PRESENCE OF ANIMALS IN A NATURAL FEEDING ENVIRONMENT

(57) Abstract

A communications system permits animal carried transponders (130), such as ear tag transponders, to be selectively addressed and detected when an animal is proximate to an unterminated wire (110). Addresses impressed on a frequency carrier on the unterminated wire (110) are coupled to an animal's transponder using a near field coupling, such as an electrical field coupling. When an animal's address is detected, the animal's transponder (130) responds with a data stream carrying a tone or with a signal of different frequency coupled to the unterminated wire. Coupling is enhanced by connecting signals to be transmitted and a receiver for signals to be received to the animal's body. The unterminated wire (110) can be positioned along a feeding/water trough (120) in an agricultural environment to detect when a particular animal feeds or around a gate to detect when an animal passes through the gate.

