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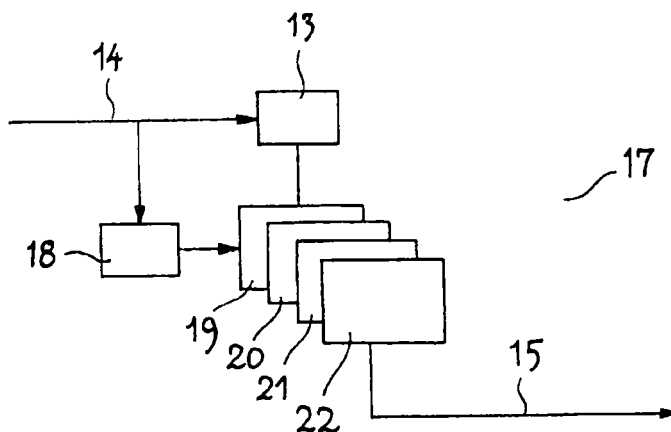
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(54) Title: COMMUNICATION CONTROLLER FOR AN ACTIVE TRANSPONDER



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(57) Abstract: Method and communications controller for processing of encoded information by a battery-powered active transponder. It is particularly provided for the application within a transponder system for the wireless payment of road toll, whereby the transponder over an antenna receives modulated microwave radiation of preset frequency for obtaining an input signal which is demodulated for obtaining a binary input data sequence. This is then fed to a digital processor (microcontroller) operated by a processing clock of preset clock frequency, for decoding and generating of a binary output data sequence, from which within a certain duration as an answer to the received input signal an output signal is formed, which is transmitted over the antenna of the transponder. For reducing the load of the battery of the transponder by the pulse-like occurring current demand of the processor with at the same time a relative short duration between the receiving of the input signal and the irradiating of the output signal, the data of the decoded input data sequence are parallel processed by the processor (17) with a relative low clock frequency. A plurality of processor modules (19-22) of the processor (17) which are integrated to a processing unit realizing the parallel occurring processing of data of the decoded input data sequence and are operated by a timing generator (symbol clock retrieving circuit 18) with a relative low clock frequency of the processing clock rate.



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