# THIN RADIO FREQUENCY TRANSPONDER WITH LEADFRAME ANTENNA STRUCTURE

## ABSTRACT

A novel radio frequency transponder (tag 210) with a minimum of components and connects is thin and flexible because these components and connects can be unsupported by a substrate layer. This is accomplished by using a conducting leadframe structure not only as a connection medium but also as a circuit element, i.e., the transponder antenna. In various preferred embodiments, the leadframe is mechanically positioned and fixably attached to a circuit chip 210 so that the leadframe (antenna 200) is self supporting. A protective coating 270 can be added where the leadframe is attached to the circuit chip 210. Further a protective surrounding can envelops the entire leadframe antenna, circuit chip, and if provided, the protective coating.
Fig. 2A