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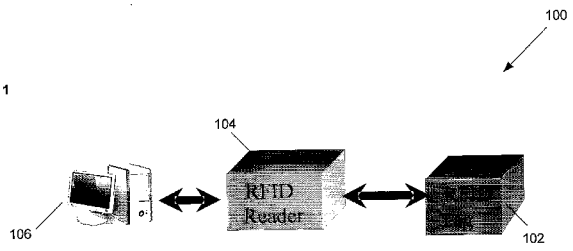
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(54) **Title**: RADIO FREQUENCY TRANSPONDER SYSTEM

Figure 1



(57) **Abstract**: A radio frequency transponder, including: a substrate; and at least one planar antenna on said substrate, said antenna having a shape determining a corresponding resonant frequency of said antenna; wherein said antenna causes a phase difference between backscattered signals generated in response to excitation of said antenna by orthogonally polarised interrogation signals at said resonant frequency, and said phase difference represents a code of said antenna.