

Title (en)  
BATTERY-LESS TRANSPONDER CIRCUIT

Title (de)  
BATTERIELOSE TRANSPONDERSCHALTUNG

Title (fr)  
CIRCUIT DE TRANSPONDEUR SANS PILE

Publication  
**EP 1097438 A1 20010509 (EN)**

Application  
**EP 99933028 A 19990713**

Priority  
• GB 9902250 W 19990713  
• GB 9815120 A 19980714

Abstract (en)  
[origin: WO0004520A1] A battery-less transponder circuit for use in an Electronic Article Surveillance tag is disclosed. The transponder is comprised of first and second resonant circuits which are electrically coupled across a common component and yet resonate at different frequencies. The first resonant circuit ideally comprises an inductor, a capacitor, and a diode, and the second resonant circuit consists of only an inductor which is mutually coupled to the inductor of the first resonant circuit but is connected across the diode of the first resonant circuit. This connection has the effect of giving rise to a second resonant circuit which is both electrically and magnetically coupled to the first resonant circuit. An extremely inexpensive yet effective transponder circuit results.

IPC 1-7  
**G08B 13/24; G06K 7/08**

IPC 8 full level  
**G06K 19/07** (2006.01); **G08B 13/24** (2006.01)

CPC (source: EP)  
**G06K 19/0723** (2013.01); **G08B 13/2422** (2013.01); **G08B 13/2431** (2013.01)

Citation (search report)  
See references of WO 0004520A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0004520 A1 20000127**; AU 4920599 A 20000207; EP 1097438 A1 20010509; GB 9815120 D0 19980909; TW 445436 B 20010711

DOCDB simple family (application)  
**GB 9902250 W 19990713**; AU 4920599 A 19990713; EP 99933028 A 19990713; GB 9815120 A 19980714; TW 87115912 A 19980924