

Title (en)  
Passive entry x-y-z transponder antenna

Title (de)  
Passive x-y-z Antenne für ein Antwortsendegerät

Title (fr)  
Antenne passive x-y-z pour transpondeur

Publication  
**EP 0783190 A1 19970709 (EN)**

Application  
**EP 97100021 A 19970102**

Priority  
US 947896 P 19960102

Abstract (en)  
In a transponder unit adapted to communicate with an interrogation unit by transmitting RF signals to and receiving RF signals from the interrogation unit, a transponder antenna comprising an elongated tubular first ferrite antenna coil (12), oriented to transmit and receive RF signals a first direction parallel to the barrel of said coil; an elongated tubular second ferrite antenna coil (14), oriented at a different angle from said first coil and adapted to transmit and receive RF signals in a second direction parallel to the barrel of said coil; and a substantially flat, planar air coil (10) adapted to transmit and receive RF signals in a direction perpendicular to the plane of said coil, and oriented at a different angle from said first and said second coils.  
<IMAGE>

IPC 1-7  
**H01Q 21/28**; **H01Q 7/00**

IPC 8 full level  
**H01Q 7/00** (2006.01); **H01Q 7/08** (2006.01); **H01Q 21/28** (2006.01); **G07C 9/00** (2006.01)

CPC (source: EP)  
**H01Q 7/00** (2013.01); **H01Q 7/08** (2013.01); **H01Q 21/28** (2013.01); **G07C 9/00309** (2013.01)

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