

Title (en)  
Electronic article surveillance system.

Title (de)  
Elektronisches Warenüberwachungssystem.

Title (fr)  
Système électronique de surveillance d'objets.

Publication  
**EP 0135049 A1 19850327 (EN)**

Application  
**EP 84108629 A 19840720**

Priority  
US 51939583 A 19830801

Abstract (en)  
An electronic article surveillance system for microwave frequencies (500 MHz and higher) has low profile (i.e., shallow) transmitter antenna arrays and a low profile receiver antenna array, each array comprising a pair of thin metal patches, spaced apart in the normal direction of travel through a surveillance zone, and a thin metal ground plane behind the patches. The patches and ground plane are in spaced parallel relationship. Each metal patch and the adjacent portion of the ground plane together form a cavity resonator which resonates at a desired transmitter or return signal frequency and thereby form a signal radiating or receiving structure. The patch size, path to ground plane spacing, and spacing between patches are determined by the desired resonant frequency.

IPC 1-7  
**G08B 13/24**

IPC 8 full level  
**G01S 7/02** (2006.01); **G01S 13/04** (2006.01); **G08B 13/24** (2006.01)

CPC (source: EP)  
**G08B 13/2422** (2013.01); **G08B 13/2471** (2013.01); **G08B 13/2474** (2013.01)

Citation (search report)  
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• [Y] US 3680136 A 19720725 - COLLINGS RUPERT H  
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DOCDB simple family (application)  
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