

Title (en)  
Signal coupling methods and arrangements

Title (de)  
Verfahren und Anordnung für Signalkopplung

Title (fr)  
Procédés et dispositifs de couplage de signaux

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Application  
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Abstract (en)  
Signal coupling arrangements are described in which the effect of unwanted signals transferred between two antennas is compensated for. In one arrangement a microstrip edge coupler is used as a compensation network to provide a cross-coupling path for the transfer of a compensating signal between two antenna signal paths. In another arrangement, an antenna assembly includes cross-slots which, in association with a conductive ring, provide two mutually orthogonally polarised radiation signals and connections to the conductive ring have closely spaced portions which provide compensation for and minimise the effect of unwanted mutual coupling. <IMAGE>  
In the four port coupling network (1), main signal paths (11,12) are provided between ports (2,3) and ports (4,5) respectively. In operation, unwanted signal will pass between antennas (6,7) via signal path (14), to compensate for this, a cross-coupling path (13), e.g. a microstrip edge coupler network, is arranged between signal paths (11,12) to provide a compensating signal of similar magnitude and opposite phase. An Independent claim is also included for an arrangement that uses a printed ring conductor coupled to two signal ports and also coupled to a printed cross slot conductor pattern.

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