

Title (en)  
Antenna-filter-combiner

Title (de)  
Antennen-Filter-Combiner

Title (fr)  
Filtre-combineur pour antenne

Publication  
**EP 0633621 B1 19990922 (DE)**

Application  
**EP 94110380 A 19940704**

Priority  
DE 4322843 A 19930708

Abstract (en)  
[origin: EP0633621A1] Antenna-filter combiners serve for connecting a multiplicity of frequency channels to a sending antenna. For simple construction with low-loss transmission filters, an arrangement is provided according to the invention having  $m$  circulators connected in a waveguide leading to the antenna, and  $m$  transmission channels are in each case fed into the respective third gate of the circulators via a frequency-separating filter consisting of  $m \leq n$  partial filters connected together. In this case, the signal flow direction of the circulators is exploited so that the frequency channels already fed in at circulators 1...(  $\beta - 1$  ) lying at positions in front along the course of the waveguide are at least approximately totally reflected at the frequency-separating filter of the  $\beta$  th circulator and are fed on towards the antenna via possible further circulators (  $\beta + 1$  )... $n$  connected to frequency-separating filters. <IMAGE>

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**H01P 1/213**

IPC 8 full level  
**H01P 1/213** (2006.01)

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