

## Novel approach for narrowband superconducting filters

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The concept and latest experimental results for planar bandpass filters made from high temperature superconductors (HTS) are reported. In the proposed approach, coupling between adjacent resonators is provided by "disturbing" the resonator symmetry. This allows the realization of very narrowband filters with closely spaced resonators. Furthermore, filter parameters can be trimmed in a much wider range (including sign of coupling) than in conventional structures. Results for several quasi-elliptic filters for mobile communication base stations are presented.

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