

Title (en)
Tunable bandpass filter

Title (de)
Abstimmbar Bandpassfilter

Title (fr)
Filtre bande-passante accordable

Publication
EP 1885018 A1 20080206 (EN)

Application
EP 06015381 A 20060724

Priority
EP 06015381 A 20060724

Abstract (en)
The invention provides a tunable bandpass filter, comprising a plurality of resonator cavities (2) being equipped with a movable frequency tuning elements (10) extending at least partially in the cavity (2), and having a movable control element (20), wherein the frequency tuning elements (10) and the control element (20) are arranged such that an adjusting movement of the movable control element (20) causes the tuning elements (10) to be simultaneously displaced in order to adjust the centre frequencies of the resonator cavities, characterised in that each frequency tuning (10) element comprises a cam follower (12) which is projecting from a wall of the respective resonator cavity (2) and which is guided for shifting movement to allow to adjust the position of frequency tuning element (10) by sliding the cam follower (12) further inside or outside with respect to the resonator cavity wall; the control element (20) comprises a cam surface (22) with a predetermined contour, the control element (20) and the cam followers (12) being arranged with respect to each other such that the cam surface is in sliding contact with an outer end of each of the cam followers (12), wherein the control element (20) is mounted for linear movement along a first direction; and a drive (24) is provided to adjust the position of the control element (20) along the first direction so that each of the cam followers (12) and thereby its associated frequency tuning element (10) is adjusted as determined by the contour of the cam surface (22).

IPC 8 full level
H01P 7/06 (2006.01); **H01P 1/205** (2006.01)

CPC (source: EP)
H01P 1/205 (2013.01); **H01P 7/06** (2013.01)

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Designated contracting state (EPC)
DE FR GB

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1885018 A1 20080206; EP 1885018 B1 20090902; DE 602006008927 D1 20091015

DOCDB simple family (application)
EP 06015381 A 20060724; DE 602006008927 T 20060724