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### (54) NARROW BANDWIDTH SURFACE ACOUSTIC WAVE FILTER

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#### (57)ABSTRACT

A Surface Acoustic Wave (SAW) Impedance Element Filter (IEF) comprises a cascade of Gamma sections. Each of the Gamma sections comprises a series SAW resonator and a shunt SAW resonator deposited in a surface of a piezoelectric substrate with an additional capacity connected in parallel to the shunt SAW resonator. All the series and shunt SAW resonators have pitches (P) which are substantially equivalent. The SAW IEF has smaller bandwidth to satisfy some specific applications.

