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(54) **ULTRA-BROAD BANDWIDTH MATCHING TECHNIQUE**

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(57) **ABSTRACT**

A multicomponent network may be added to a transmission line in a high-frequency circuit to transform a first impedance of a downstream circuit element to second impedance that better matches the impedance of an upstream circuit element. The multicomponent network may be added at a distance more than one-quarter wavelength from the downstream circuit element, and can tighten a frequency response of the impedance-transforming circuit to maintain low Q values and low VSWR values over a broad range of frequencies.