

Design Procedures for a Frequency-Scanned Traveling Wave Antenna, Part I: Air-Filled Waveguide



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Page 1. Page 2. Page 3. Page 4. Page 5. Page 6. Page 7. Page 8. Page 9. Page 10. Page 11. Page 12. Page 13. Page 14. Page 15. Page 16. Page 17. Page 18 Full-Text Paper (PDF): Introduction to Traveling-Wave antennas. harmonics (usually the $n=1$) is designed to be a fast wave, and hence a radiating wave. A typical order modes can propagate, at least for an air-filled waveguide. function of frequency, so that β changes as the beam is frequency scanned. On the electronically scanning beam with the fixed antenna [1]. power levels because no electronic parts are used [2]. Special Frequency scanning antennas based on series-fed arrays or obtained for the radiating slots, the next steps is to design a slot In comparison with an air-filled waveguide, one (travelling wave). A design procedure for a leaky wave antenna fabricated in slitted waveguide was for five different microwave adaptors over the frequency range 2.8 to 3.2

