

# Abstracts

## A Two-Stage Spatial Amplifier with Hard Horn Feeds

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*T. Ivanov and A. Mortazawi. "A Two-Stage Spatial Amplifier with Hard Horn Feeds." 1996 Microwave and Guided Wave Letters 6.2 (Feb. 1996 [MGWL]): 88-90.*

A spatial amplifier consisting of two stages, with each stage employing nine HEMT's, has been developed. The coupling to and out of the spatial amplifier is accomplished by placing it in the reactive field of two hard horn antennas. The hard horns' improved aperture field uniformity ensures the simultaneous saturation of most of the active devices across the amplifier array. The amplifier has a small signal gain of 16.2 dB at 9.98 GHz and produces 90 mW at a 2-dB compression point.

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