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Margolin

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[54] **SIMULATED AM RADIO**

[76] Inventor: **Jed Margolin**, 3570 Pleasant Echo Dr., San Jose, Calif. 95148-1916

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[52] **U.S. Cl.** **381/61; 381/80; 381/124**

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Primary Examiner—Forester W. Isen

Assistant Examiner—Xu Mei

[57] ABSTRACT

A realistic illusion of listening to an actual AM radio is produced by providing a number of audio program signals and by simulating the process of tuning across the radio dial where each station is playing a different program. In a superheterodyne receiver using envelope detection, tuning a station off-channel results in a changing mixture of distortion and noise. The distortion function is caused by a variety of processes, among them being the filtering action as parts of the signal spectrum are cut off by the bandpass filter in the IF amplifier. Another is caused by the reduction in the carrier which causes the foldover of negative peaks in the envelope detector.

18 Claims, 27 Drawing Sheets

