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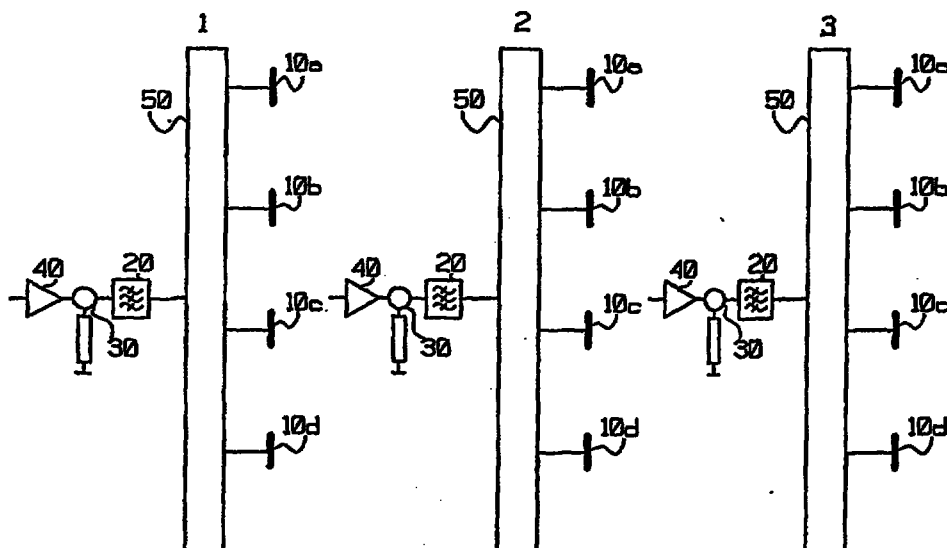
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(54) Title: TRANSMITTER INTERFERENCE REJECTION



(57) Abstract

The present invention relates generally to the use of antenna array systems used in e.g., mobile radio systems. Interfering signals are received from adjacent antenna arrays. These result in intermodulation ("IM") products which interfere with the transmission of the desired signals. Because these IM products are transmitted along the path between the amplifier and the antenna element, it is possible to adjust the length of this path from element to element, thereby shifting the wavefront of the IM product so that they are less coherent. To keep the total transmission length for the desired signal constant, the length between the splitter and amplifier is adjusted so that the total transmission length stays constant from splitter to antenna element. The result is that the wavefront for the desired signal stays coherent while that for the IM products does not. This provides less interference from the IM products.