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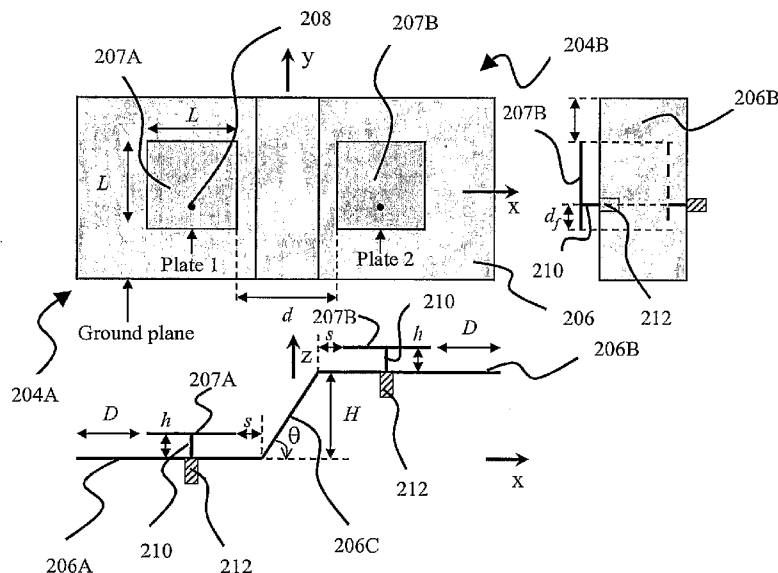
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(54) Title: COMPACT MULTI-TIERED PLATE ANTENNA ARRAYS



(57) Abstract: An antenna array having a plurality of array elements is disclosed. The antenna array comprises a first array element (204A) having a first suspended radiator (207A) and a first ground conductor (206A), the first suspended radiator being displaced from the first ground conductor. The antenna also comprises a second array element (204B) being adjacent to the first array element, the second array element having a second suspended radiator (207B) and a second ground conductor (206B), wherein the second suspended radiator is displaced from the second ground conductor. In the antenna the first ground conductor is adjacent to and displaced from the second ground conductor and the first ground conductor is disposed on a first tier and the second ground conductor is disposed on a second tier to form an at least two-tiered ground conductor.

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